252 heads of Polypogon held over fire to singe off
262 awns, head rubbed between hands to extract seeds and these pounded in pit mortars. All small seeds
[264 mixed with cold water and made into thick gray-
272] colored gruel (ha·yi·l) which was drunk for refreshment, "like lemonade"; women often gave children drink of this gruel between meals. Two varieties of chia might be used mixed together, but neither mixed with Mentzelia seeds. Although small seeds now regarded as something of delicacy, they are still occasionally gathered in large quantity, using aboriginal methods; in 1933 some Kawaiisu brought 10-lb. flour sack of chia seeds to SM's rancheria, offering them for sale.

243 Wheat now cut by hand, piled up on piece of
252 canvas and thrashed with 4-ft. pole; winnowed in
262 flat tray, parched in oven, pounded into flour in pit mortars, and flour mixed with water and little sugar to make stiff mush. Corn is eaten on cob in roasting ear stage or allowed to dry on cob; 2 cobs twisted against each other to remove kernels, which are parched, pounded, winnowed, and meal made into mush.

252 Juniper berries boiled fresh; when dry and
262 fully ripe seeded by hand, flesh pounded in pit mortars and eaten raw; pounded mass never dried into cakes or beverage made from berries. Flesh of juniper berries "sweet." Ripe boxthorn berries pounded in pit mortar, taken up in hands, mixed with small amount of water and made into "biscuits" which were dried in sun; no fat added. These small balls stored; when used broken up, soaked in water, eaten; tasted "just like grapes."
[251] Elderberries boiled in clay pot with water and eaten (SM); FP said they "tasted queer." Never stored for winter.

Rush roots peeled, sun-dried, pounded into flour (obolinil) in mortar, mixed with water and stone boiled into mush.

252 Several plant foods roasted; for mescal short
264 trench dug, fire made in trench, tender young
262 stalks cut in half, laid on fire, covered with dirt and left overnight. In morning stalks uncovered, peeled, and eaten. Quantity of Spanish bayonet stalks laid directly on top of blazing brush fire; stalks turned once while cooking; when soft, stalks buried in dirt or sand, left to cool; burying made peel "slip off easier" (SM). Fleshy receptacles of Opuntia buds held over fire on end of sharp-pointed stick to singe off stickers (ukun), then spread on hot flat rock placed at bottom of pit, covered with another hot rock and pit filled with loose earth or hot ashes. Receptacles left to roast for about 8 hours; when taken out of pit outer skin peeled off and inner part eaten. Fleshy stalks wild rhubarb roasted overnight in hot ashes, eaten next morning.

252 Immature pods of tree yucca, while still in-
262 side green sheath, "boiled like cabbage" in clay pot (SM).

Several plant foods eaten raw by gatherer on spot; such included berries of deadly nightshade;

252 wild grapes; green Digger pine nuts; seeds of
262 wild heliotrope, which "smell like piñons, taste like hot peppers"; leaves, stems of salt grass, which was eaten plain or rolled in palm of hand with clover, Cotyledon laxa, or Ellisea membranacea; leaves of Coreopsis, wild onion, and fiddle-necks; leaves and heads of wild garlic; tender leaves, stalks of clovers. Some greens, etc., gathered in quantity by women, brought home and fed to family raw; these included gooseberries, tule roots, clover species, young tender stalks of red thistle, which were gathered before plant blossomed, and mariposa lily, yambal bulbs; latter peeled and eaten raw.

252 Manzanita berries crushed with rotary motion
262 on grinding slab or in mortar, made into drink
272 as fully described by Gifford (Gifford, 1932 b, 22, pls. 4b, 5). Dried whole boxthorn berries pounded in pit mortar, treated in similar fashion. Entire plant of Indian tea and Monardella candicans, either dried or fresh, boiled for short time in water, decoction drunk; sugar now added to tea from Monardella. Salt grass put in pot, covered with water; when saline crystals had dissolved in water, grass removed and decoction drunk. Mint, which grows around springs near houses, also used occasionally for nonmedicinal
[273] tea. Fermented or intoxicating beverages formerly unknown.

222 Manufactured foods and gum.- Honey dew, which
262 is produced in summer by aphids on stalks, leaves
263 of cane (paha·bil), Phragmites communis Trin., utilized as sweet (ha·bišt). Canes cut in July,
258 August, spread out in hot sun to dry; then heaped on bearskin, "because bearskins are good and thick for beating," and flayed vigorously with hardwood stick beaters. Beating caused saccharine crystals on canes to adhere to bearskin; these crystals scraped off skin, winnowed on flat tray, put into small cooking basket, and made into stiff dough with cold water. Doughy mass removed from basket with hands, spread on twined tule tray (fig. 8a); end of tray folded over wet sweets, and tray put away for 6-7 days to allow sugary substance to dry. When dry, lumps of sweet broken off the hard brown loaf with rock and eaten dry with chia gruel. Presence of excess of carbohydrate which aphids derive from cane and are unable to assimilate, leaving it on cane as
[824] honey dew, SM accounted for as follows: "The little bugs (tohawal, generic term for insects) make the sugar on the cane, like bees, and then they fly away. They do this in summertime, about in July; they leave a sticky stuff on the cane; this dries when the cane is cut, then is beaten off by pounding the cane. The bugs aren't on the cane when it's pounded. It isn't the juice inside the cane the bugs get out." Use of honey
171 dew as sweet also noted for Surprise Valley Paiute (Kelly, 103), Owens Valley Paiute (Steward, 1933, 245), Yavapai and Papago (Gifford, correspondence). Owens Valley Paiute, like Tübatulabal,

171 use honey dew which forms on Phragmites communis, also on rush, Juncus; Yavapai and Papago obtain it principally from willow, but also from cane.

262 Tübatulabal also occasionally sucked sections
263 of freshly cut cane for its sweetness (SM).

Saline crystals which form in dry hot weather
258 on salt grass made into "salt" (tu·t). Salt grass
137 grows in saline areas, on valley floors, at base
824 of foothills; its utilization among Tübatulabal depended on weather, as "after a rain it takes a month for salt grass to get salt again" (SM). Grass cut, spread out on mats to dry in sun; after grass thoroughly dry same process followed as described above for obtaining honey dew, save that collected crystals made up into balls or flat cakes instead of being spread on tule tray. Chunks
[272 equal to 2-3 full tablespoons broken off dry ball,
278 dissolved in cupful of water and drunk either for
757] refreshment or as laxative and to rinse out stomach. Salt-grass crystals also obtained by children who took willow switches and "swept" salt grass with them early on summer mornings; when sufficient quantity of crystals had adhered to stick, child took it to shady spot and licked off crystals. Fresh salt grass soaked in water and this
[262 water sprinkled over raw chopped clover, or sprigs
263] of salt grass and clover rolled between hands and eaten. Substance manufactured from salt grass never used to season meat or mushes.

314 Chewing gum made from milky juice of Asclepias
824 erosa Torr. (pololi·wa·bI·l); stalk of plant cut near top before it blossomed and juice collected in 4-in. tubular sections of jointed stalk of Eriogonum elongatum gramineum n. var. Stokes (ined.), (šiko·ništ). Joint of stalk served as natural stopper for bottom end of tubular section; juice run into stalk through open upper end; filled sections of stalk set in hot ashes to roast until plant juice inside has congealed; stalks then cut open, gum removed and chewed. This gum "better than store gum" (ES).

262 Meals.- Meals eaten twice daily around sunrise
264 and before sundown. At morning meal (wi·lil) and evening meal (tu·kil) men, children ate first, then women. Meat eaten at both meals, "if people
[445] had it." Men, women used spoons (ta·mil) made from antelope horn (ša·wun) for eating acorn mush (SM), or wooden spoons (FP); FN said spoons of elk, antelope horn not made. Acorn mush eaten with fingers (MM). No formula spoken before eating. Children pieced during day; "mothers gave
[753 them a cup of chia gruel" (SM). Food rarely eaten
774] after dark as ghosts "come around at night; they
[609] might throw something in the food that would make a person sick" (SM, FP). Because strangers potential enemies who might put poison in food, person avoided eating with them. Women when out for day gathering seeds, tending tobacco, etc., took lunch with them which they ate about 10 or 11 a.m.; men hunting deer "didn't take any food; they came home in the evening" (FP).